



GENERAL REQUIREMENTS AND RECOMMENDATIONS FOR HOMEOWNER CONNECTION TO YORK COUNTY SANITARY SEWER FACILITIES GRAVITY SEWER

The following outlines the basic requirements of York County and the Uniform Statewide Building Code for properties connecting to York County sanitary sewer facilities. Also included are recommendations that will help ensure the reliable operation of the homeowners new building sewer and County facilities.

It is the law that all property owners must contact “MISS UTILITY” at 1-800-552-7001 at least 48 hours prior to performing any excavation on their property.

Prepared by the York County Department of Environmental and Development Services

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DEFINITIONS

REGULATORY AGENCIES:

American Standard for Testing Materials (ASTM) - a non-profit organization which performs testing of materials to establish and maintain minimum standards of quality.

Hampton Roads Sanitation District (HRSD) - a Commonwealth of Virginia regulated agency that is responsible for the final collection, treatment, and disposal of sanitary sewage wastes.

MISS UTILITY - a one-call service which locates utility services for underground utility system owners (water, wastewater, electricity, natural gas, telephone, etc.).

Uniform Statewide Building Code (BOCA) - codes adopted by the Commonwealth of Virginia which regulate the construction of buildings and their plumbing, electrical, mechanical, and other facilities.

York County Department of Environmental and Development Services (EDS) - the department of York County government that provides, governs, and maintains sanitary sewer, storm sewer, solid waste, and other related utility services to residents of York County.

York County Division of Building Regulation - the division of the Department of Environmental and Development Services that governs and enforces the Uniform Statewide Building Code.

York County Sanitary Sewer Ordinance Chapter 18 - the chapter of the Code of York County which sets forth uniform requirements for sewage disposal in York County.

York County Sanitary Sewer Standards and Specifications - the standards by which all sanitary sewer collection systems are designed and constructed within York County.

MATERIALS AND CONSTRUCTION:

Building Sewer - a sewer system conveying wastewater from the improvements on the premises of a user to, the facilities of the County, to private sewage systems, to individual sewage disposal systems, or to other points of disposal.

Polyvinyl Chloride (PVC) - plastic materials used for pipe and fittings manufacture which, for the purpose of this document, are used to transport water and wastewater.

Drain, Waste, and Vent (DWV) - plastic materials specifically designed for use on drainage, wastewater, and/or vent applications.

Standard Dimension Ratio (SDR) - an industry standard measurement of the diameter and wall thickness of a pipe.

Fittings - materials used to create connections, turns and/or intersections in a run of pipe and which may be made of PVC, rubber, or iron.

Cleanout/Cleanout Stack - a vertically installed section of pipe connected to the building sewer. The stack has a cap installed flush with the ground level which can be removed to enable access for cleaning and removing blockages from the sewer system.

FERNCO - a brand of pipe fitting which is used to connect pipes made of different materials.

APPROVED CONSTRUCTION METHODS AND MATERIALS

The following construction materials are recommended and approved for use in connecting the improvements on the premises (house) to the sanitary sewer facilities of York County:

PIPE

- At a minimum SDR 26, DWV pipe which meets ASTM standard D2665
- Cast Iron pipe which meets ASTM standard A74

Note: *In York County, concrete, terra cotta, orangeburg, SDR35 PVC, and other similar pipe materials can not be used for connecting building sewers to the York County system.*

FITTINGS

- PVC plastic fittings which meet ASTM standard D3311
- Cast iron fittings which meet ASTM standard A74

Note: *FERNCO fittings are designed to be used where an existing iron pipe building sewer is being connected to a new PVC pipe building sewer. This situation occurs at the foundation of the house. The use of FERNCO fittings at any other location is not recommended.*

GASKETS

- Mechanical joint gaskets must meet ASTM standard F477

JOINTS

(may be either mechanical joint gasket or solvent weld glue)

- Mechanical gasket joints for PVC pipe must meet ASTM standard D3212
- Mechanical gasket joints for cast iron pipe must meet ASTM standard C564
- Solvent weld glue joints for PVC pipe must meet ASTM standards F656 for purple primer, ASTM D2564 for glue (not purple), and ASTM D2855 for application

CONNECTING YOUR HOUSE TO THE COUNTY SYSTEM

The following describes the normal process for connecting your house to the facilities of the County. The attached sketches may help you better understand the process. You may contract with a plumber or perform the work yourself, in either case the following steps should and/or must be followed.

I. Plan the Location of the New Building Sewer

Locate the County installed cleanout at the property line. This cleanout was installed during system construction and should have been located and marked with green paint by MISS UTILITY. Remember, you must notify MISS UTILITY 48 hours prior to the start of work and they must locate all underground utilities before you or your plumber begin digging on your property.

Locate your existing septic tank and where the building sewer exits from under the house and connects to the septic tank.

Decide where you will disconnect your old building sewer from the septic tank and decide the path of the new building sewer from your house to the cleanout at your property line. Where possible, you may be able to redirect the building sewer under your house so that it shortens the length of new building sewer that must be installed.

II. Obtain the Necessary Plumbing Permit

Prior to beginning the excavation of the new building sewer trench, obtain the necessary plumbing permit from the York County Division of Building Regulation office located at 103 Service Drive.

III. Obtain County Inspections

Contact the York County Division of Building Regulation at 890-3910 to schedule all inspections. Two inspections (at least) will be performed by the County and are summarized as follows:

1. The first inspection will need to be performed once all of the new building sewer pipe, fittings, cleanouts, and connections to the County provided cleanout and disconnection from the septic tank have been completed;
2. A final inspection will be required to ensure that the septic tank has been properly abandoned.

CONSTRUCTION OF THE NEW BUILDING SEWER

The following is a general step-by-step description of how to install your new building sewer. The County strongly recommends 4 inch diameter pipe be used for the new building sewer and cleanouts.

Installing the Pipe

- After verifying the depth of the existing building sewer where it exits the house, install the new building sewer from that point at a slope of no less than 1/8" per foot fall (which equals about 1 foot of fall per every 100 feet of pipe installed) to the County provided cleanout at your property line. Pipe must be laid "bell-end" up-slope.
- If your new building sewer is installed under your driveway, the County recommends that one of the following be observed:
 1. For a concrete or asphalt driveway a minimum cover of 6 inches should be maintained between the top of the pipe and the bottom of the concrete or asphalt surface;
 2. For a gravel or unimproved driveway a minimum cover of 18 inches should be maintained between the top of the pipe and the top of the gravel or unimproved surface;
 3. You may install the new building sewer in a steel or iron casing pipe under the driveway, this will allow for as little as 2 inches of clearance between the top of the casing pipe and the bottom of the driveway material surface.

Installing the Cleanouts

- Cleanouts must be installed starting 5 feet from where the building sewer exits from under the house, every 75 feet thereafter, and at any horizontal turn in the pipe which is at an angle greater than 45 degrees. All cleanout caps must be installed flush with the ground level.

Connecting to the County Provided Cleanout at Your Property Line

- Excavate a hole of sufficient size around the cleanout at the property line. Cut the cleanout stack (a hack saw will work) where the new building sewer is to connect. Install the appropriate "WYE" fitting and reinstall the remainder of the standpipe. Please remember to reinstall the cast iron cleanout cover flush with the normal ground level.

Disconnecting the House from the Septic Tank

- Cut the old building sewer at the previously determined location somewhere between the foundation of the house and the septic tank. Install the appropriate fittings and pipe to reconnect the house to the new building sewer. Remember to install a cleanout at this critical location.

Abandoning the Septic Tank

- Within 30 days of redirecting the wastewater flow from the septic tank into the new building sewer, the septic tank must be abandoned. Abandonment includes the removal of all liquid, solid, and semi-solid matter from the tank and completely backfilling the tank with sand or other approved inert material. The top of the tank must be collapsed into the tank.

THE WASTES REMOVED FROM THE TANK MUST NOT BE DISCHARGED INTO THE FACILITIES OF THE COUNTY. THE WASTES MUST BE DELIVERED TO A HAMPTON ROADS SANITATION DISTRICT (HRSD) TREATMENT PLANT. CONTACT A SEPTIC TANK CLEANING AND PUMPING SERVICE COMPANY TO HAVE THIS PERFORMED.

Important things to be on the lookout for:

- **If, during excavation of the building sewer trench, the soil where the building sewer is to be located is saturated with water, it is advisable to over-excavate the trench by a few inches and replace it with several inches of tamped dry sand or crushed stone bedding material. This will help ensure against settlement of the pipe at a later date. Pipe settlement is a major cause of slow draining systems and greatly increases the possibility of blockages and back-ups.**
- **Extra care must be taken to ensure that no sand, stones, or other debris is allowed to enter the new building sewer during its installation. If the installation of the new building sewer will take more than one day or if the inspection by County personnel is not performed the same day as the pipe is installed, place temporary covers over all open ends of pipe to prevent groundwater and other debris from entering the pipe.**

QUESTIONS?

These are the steps that are followed when connecting to the sanitary sewer facilities of York County. If you have questions please call one of the following numbers:

York County Department of Environmental and Development Services

Utility Engineering and Operations → 890-3752

Building Regulation → 890-3522